

THE HYMENOPTERA OF THE GEORGETOWN MUSEUM.

PART V.

By P. CAMERON.

CHALCIDIDÆ.

CHALCIDINÆ.

Chalcis annulata, F.

Chalcis annulata, Ashmead, Class of Chalcid Flies, Mem. Cair. Mus., i, 408; Howard, Journ. Linn. Soc. xxv., 80.

Chalcis ovata, Say; Cresson, Trans. Am. Ent. Soc., iv., 59, Cameron, Biol. Cent. Am., i, 99, Pl. iv., f., 16; Marshall, Ann. Soc. Ent. Fr., 1892, 70; Crawford, Bull., Ent. Tech. Ser. U.S. Dep. Agric., Ser. i, 19, Pt. ii p. 15, f., 8-10; Marshall, Ann. Soc. Ent. Fr., 1892, 70.

Chalcis annulipes, Walker, Ent. Mag. ii, 29.

Bred from the Pyralids, *Mesocondyla concordalis*, and *Lineodes*, sp.

The extent and shape of the black markings on the legs and the size vary in this Common North and South American species. *C. incerta* is regarded by Ashmead, *l.c.*, as identical with *ovata*, but Crawford, *l.c.*, p. 16, considers it to be a good species, easily separated by differences in the femoral teeth.

Spilochalcis nunani, sp. n.

Pallid yellow, the mesonotum darker coloured, densely covered with blackish pubescence; the apex of the 2nd and the following abdominal segments fuscous, antennal scape yellow, narrowly black above, the upper half of the flagellum black, the lower pallid fulvous; the lower side of the scape with a semicircular projection, hollowed on the innerside; hind femora with 13 small rounded teeth; the basal about twice the size of the others and more sharply pointed, the 2nd smaller, more isolated—Apex of scutellum with a broad shallow incision. Abdominal petiole about 4 times longer than wide. Pubescence on top of thorax dense, black. Metanotum with 3 rows of areæ, the basal distinct, the inner pair twice wider than long, narrowed on the inner-side, the 2nd row has the inner pair wider than long, the outer longer than wide, the inner of the two narrower than the outer; there is one large area on the centre of the apex. Wings hyaline, the apex fuscous. Male. Length, 4 m.m.

The head is of a much paler, clear yellow than the thorax—Basal slope of pronotum smooth, the rest of it, the mesonotum and scutellum closely reticulated—punctured, as are also the metapleuræ—Pro—and mesopleuræ mostly smooth, the apex of the latter with an irregularly striated band.

May be known from the other Guiana species by the dilated appendage on the apex of the antennal scape. It may or may not be a sexual character.

The species is dedicated to Mr. J. J. Nunan, B.A., LL.B., the President of the Royal Agricultural and Commercial Society of British Guiana.

Spilochalcis testaceicollis, sp. n.

Black, covered with a white pile; the face, clypeus, mandibles except the teeth, palpi, the outer orbits narrowly, the four anterior tibiæ and a large curved line on the upper apical half of hind femora; tarsi, whitish yellow, the sides of the pronotum broadly and the four anterior femora testaceous the four anterior coxæ and trochanters and the hind legs except the tarsi (which are testaceous) black; the hind femora with 16 teeth, which are somewhat irregular. Abdomen piceous, the back of the 2nd and 3rd blackish; the petiole four times longer than thick. Apex of scutellum broadly rounded, margined. Wings hyaline, the nervures black. Male. Length, 3 m.m.

Potaro, May.

The vertex laterally is irregularly punctured. Antennal scape testaceous, the flagellum densely covered with a white pile. Central lobe of mesonotum strongly, irregularly transversely striated, the lateral more weakly, irregularly striated, more weakly on the outer side. Scutellum closely reticulated. Metanotum widely areolated; the areola wider than long, obliquely narrowed to a point at the apex; it is bordered by 3 areæ, of which the apical is larger and wider than the others.

Spilochalcis coronata, sp. n.

Yellow, with the following parts black: a line on the top of the antennal scape, the flagellum, the upper half of the clypeus, the hollowed centre of the front, the occiput, the hinder edge of the vertex narrowly to near the eyes, a straight line running down from the middle ocellus and a curved one from the lateral, the basal slope of the pronotum except round the edges, the mesonotum except for two oblique lines in the centre, narrowed towards the apex, on the outer edge of the middle lobe, a broader line on the sides along the tegulæ, the inner side with a longish shallow incision; a pyriform mark on the centre of the scutellum on the basal three-fourths, narrow at the base, becoming gradually widened to the apex, which is broadly rounded, the meso- and metapleuræ, an irregular spot on the former before the tegulæ, a larger triangular spot below the latter and touching them and a longish spot under the hind wings, with a small triangular spot at the apex above, the metathorax except for a triangular spot under the hind wings with a small spot in front, the base of the 2nd segment irregularly and the whole of the others, black. Four front legs yellow; the hinder yellow with the following parts black: the outer apical half of the hind coxæ, the base of the mark incised, the apex on the inner side narrowly, a large oblique mark, commencing at the basal tooth and extending to the 13th, reaching near to the bottom of the upper fourth, the base more irregular and more oblique than the apex, the top rounded, a smaller, semicircular spot on the lower part of the apex, the tibiæ

behind and the basal half all round ; black. Femora with 23 teeth, close together, of almost equal size throughout. Apex of scutellum bluntly rounded, the centre slightly narrowed. Female. Length, 5 m.m.

Potaro, May.

Head, pro and mesonotum coarsely punctured, the punctures on the scutellum running into reticulations,—covered densely with a white pile. The base of the mesopleuræ smooth, irregularly longitudinally, not very closely striated ; the portion immediately below the tegulæ is smooth, divided into 2 parts by a furrow, oblique, the upper part sloping towards the base, of equal width, about one half longer than wide, the apical part larger, sloping obliquely to the apex, conical, the narrowed part above. Metapleuræ rounded, covered with large, deep, clearly separated round punctures, placed in oblique rows ; in the centre, on the lower three-fourths is a row of larger punctures, with a smooth border on either side. The metanotum short, the reticulations large, the basal row small, the central large, the middle pair oblique, wider than long, narrowed inwardly ; the narrowed part at the apical junction is closed by a keel, forming a small triangular area. Abdominal petiole as wide as long. Near the apex of the hind coxæ above is a distinct, sharp spine. Abdomen shorter than the thorax ; the sheath of the ovipositor is broad.

Spilochalcis guianensis, sp. n.

Reddish testaceous, the flagellum of antennæ, apex of femoral teeth and the sheath of ovipositor, black ; there are 13 femoral teeth, the basal long, curved testaceous, black at the apex, the others short, thick ; wings hyaline, the nervures testaceous. Apex of scutellum projecting more broadly than the sides, almost transverse. The middle area of metanotum are large, there are 6 ; the middle pair wider than long, the outer 2 more distinctly longer than wide. The upper parts of the head, except the central hollow, pro-mesonotum and scutellum closely reticulated punctured, the parapsidal furrows crenulated. Abdominal petiole twice longer than wide, stoutly keeled in the middle above, the abdomen is as long as the head and thorax united ; the ovipositor distinctly projects. Propleuræ reticulated above ; there is a distinct, obliquely curved furrow down the middle ; the lower part is smooth, depressed and bordered above by a curved furrow. Base and apex of mesopleuræ smooth, the raised centre irregularly striated. Thoracic pile black. Female. Length, 7 m.m.

The basal half of the flagellum is brownish below. Abdomen as long as the head and thorax united, the antennal scape is pale lemon-yellow.

Spilochalcis quelchi, sp. n.

Ferruginous, the antennal scape, oral region, face, malar space and the lower part of the outer orbits, pallid yellow, the flagellum except the basal half, which is brown and the pedicel which is testaceous except broadly above, the femoral teeth, and the sheath of the ovipositor, black ; there are 16 femoral teeth, the basal long, curved, testaceous, black at the apex ; the others are small, the middle testaceous at the base. Abdominal petiole nearly

4 times longer than wide. Wings hyaline, the nervures testaceous. Apex of scutellum projecting, with a shallow incision, its sides broadly rounded. Metanotal areæ large, irregular; the basal row distinct, the central large; the middle slightly wider than long, the others longer than wide. Female. Length, 7 m.m.

Sides of front closely reticulated punctured, the hollow finely, closely striated. The basal slope of pronotum aciculated, the rest, the mesonotum and the scutellum closely, reticulated—punctured. There are 3 stout curved keels on the lower part of the propleuræ, the 3 uniting at the base; there are stout curved striæ in the centre of the upper part; the apex above is finely closely punctured; the upper basal two-thirds of the mesopleuræ irregularly, not very closely striated, the lower part aciculated; the rest closely, strongly reticulated. The pubescence on the head and thorax is dense and white.

Closely allied to *S. guianensis*, which may be known from it by the black pubescence, by the longer abdomen, with shorter petiole, and by the apex of scutellum not being bilobate.

Spilochalcis melanura, sp. n.

Yellow, the top of the antennal scape narrowly, the upper parts and apex of flagellum, a semicircular mark covering the lower half of the occiput, united to the top by a narrow median line, there being a transverse line at the middle ocellus, a small triangular spot on the centre of the basal slope of the pronotum, a broad curved line on the base of the mesonotum, on the middle two-thirds from its centre a line runs to the scutellum, at the base it is of the same width, as the transverse line; it becomes gradually wider towards the apex; there is a broad transverse line, narrowed in the middle, at the base of the scutellum; a longish conical mark in the centre of the apical three-fourths of the scutellum, the narrowed end at the base, a semicircular mark on post-scutellum, a broad transverse mark in the centre of the 1st to 4th dorsal abdominal segments, the centre of the 5th broadly above the whole of the 6th and the sheath of ovipositor, a large, irregular ovate mark in the centre of the hind coxæ, nearer the base than the apex, a smaller, squarish spot in the centre of the apex of the femora on both sides, the underside of the hind trochanters, and the femoral teeth, black; there are 12 teeth, the basal long, curved, thickened and yellow at the base; the 2nd smaller than the others. Female. Length, 6 m.m. Male, 4 m.m.

Pubescence short, white, pro-mesonotum and scutellum umbilically punctate; the apex of scutellum with the projecting margin narrowed slightly in the middle. Metanotum irregularly areolated; the areola more than twice longer than wide, obliquely narrowed to a sharp point at the base, becoming narrowed towards the apex which is transverse. Abdominal petiole short, as wide as long.

Spilochalcis peronata, sp. n.

Rufo-testaceous, the head paler in tint, as are also, to a less extent, the 4 front legs, the upper side of the flagellum, the apical joints more broadly,

the 4 front coxæ and trochanters except above, the hind coxæ, trochanters, basal third of hind femora, their teeth, apical fourth of tibiæ and the tarsi, black; there are 13 teeth, the basal large, longer than it is wide at the base, the others short, blunt, rounded. Wings hyaline, tinged with yellow in front from the base to the stigmal branch; the nervures testaceous. Basal half of scutellum with a smooth keel down the middle of the basal half, the apex bluntly rounded with a raised margin. The abdomen is missing in the only example in the collection. Female. Length to end of thorax, 4 m.m.

Densely covered with pale fulvous pubescence. Vertex and sides of front umbilically punctate. Sides of face finely, closely obliquely striated, the top and the sides of the raised central part smooth, the rest with large scattered punctures. Pro-mesonotum and scutellum closely, strongly rugosely punctured, the punctures on the mesonotum running into reticulations. Metanotum irregularly reticulated, a stout keel down the middle with a large area on either side, slightly narrowed towards the base from the outer side. Lower apical half of the base of mesopleuræ strongly longitudinally striated, the basal smooth, the 2 parts separated by a keel; the apex smooth with a curved striated band down the hollowed centre. Metapleuræ strongly, closely punctured.

Spilochalcis melanostoma, sp. n.

Luteous, the flagellum of antenna, the mandibles at the apex, the greater part of the apex of clypeus, the mark narrowed in the centre, the front except for a longish triangular line on its sides, vertex, occiput, a large triangular spot on the apical three-fourths of the mesonotum, the narrowed end at the base, a line down the centre of the scutellum, a broad irregular line on the sides of the abdominal petiole, the apex of 2nd and the greater part of the following segments, a line on the outer sides of the hind coxæ on the lower apical three-fourths, the basal third narrowed below, the apices of the femoral teeth and the hind tibiæ, except irregularly at the base, black; wings hyaline, streaked with fuscous along the middle nervures and more broadly along the apex; the nervures black. Female. Length, 8 m.m.

Hind femora with 13 short stumpy teeth the basal one large, broad at the base, short, the apex ending in a short, blunt tooth, similar to the others. Vertex irregularly striated laterally behind, laterally in front irregularly punctured; the sides of the front closely finely obliquely striated, except at the top close to the eyes. Face stoutly transversely striated. Pro- and mesonotum closely, strongly transversely striated; the scutellum strongly umbilically punctate; its apex almost transverse in the middle, the sides ending in a broad tooth, as long as it is broad at the apex, which is roundly narrowed. Metanotum widely irregularly reticulated, the centre with 2 pairs of areæ, the basal oblique, twice wider than long, the apical smaller, almost square. Abdominal petiole as long as the 2nd and 3rd segments united and two-thirds of the length of the hind coxæ-Pro- and mesopleuræ smooth, the metapleuræ coarsely reticulated except for a longish triangular space at the base, its narrow end above.

Spilochalcis lineatiscutis, sp. n.

Luteous, the upper side of antennal scape, the whole of flagellum, the head except a moderately broad line on the centre of the inner orbits, a broader one on the lower three-fourths of the outer orbits, the line narrowly projecting upwards on the inner side above, the malar space, mesonotum, the scutellum broadly in the middle from the base to near the apex, the apex of the black spot rounded, the 3rd and 4th abdominal segments above, the others entirely, the hind trochanters on the outer side, an irregular mark, almost twice longer than broad on the lower part of the hind femora close to the basal teeth, the teeth, the hind tibiæ and their spurs, black; wings hyaline, the nervures and stigma black; a broad fuscous cloud extends from the base of the anterior to the stigma, it becoming gradually wider towards the apex, where it extends slightly beyond the middle, the posterior basal part is slightly smoky not clear hyaline like the apex; the hind wings smoky to shortly beyond the middle. Abdominal petiole of the length of the rest of the abdomen and fully half the length of the thorax. Hind femora with 16 teeth, the basal twice the length of the next, the apical 3 smaller and closer together. Pro and mesonotum and the scutellum closely strongly, transversely striated; closely covered with short whitish pubescence. Metanotum coarsely irregularly reticulated; the areola twice wider than long, slightly narrowed towards the apex; the basal and apical keels slightly rounded. Male. Length, 7 m.m.

Face roundly raised in the centre, strongly irregularly transversely striated. A broad closely striated band runs obliquely from between the ocelli to the eyes.

Potaro, May.

Spilochalcis tricolorata, sp. n.

Testaceous, the pleuræ and legs pale, more yellowish, the dilated part of the abdomen piceous red, the back black in the middle; the apex of hind femora with an irregular clear yellow spot on the outside the flagellum of antennæ black, brownish, at the base below; the femoral teeth, black, small, about 18 in number; the femora are black on either side of the base of the tibiæ; wings hyaline, the nervures black. Female. Length, 3 m.m.

Densely covered with white pubescence, smooth, the upper part of the propleuræ finely, closely obliquely striated; the upper part of the mesopleuræ between the keels (which are flat and smooth) irregularly obliquely, not very strongly striated towards the base. Abdominal petiole as long as the slope of the metanotum and one-third of the length of the rest of the abdomen and less than one third of the length of the hind femora. Puncturation of the top of head and thorax sparse and weak.

Spilochalcis megalospilus, sp. n.

Testaceous, the orbits, the sides of the head, pronotum, of the mesonotum, and the scutellum pale yellow, the flagellum darker coloured, blackish towards the apex; femoral teeth short, blunt, closely pressed, about 16 in

number ; wings hyaline, the nervures fuscous. Apex of scutellum broadly rounded. Metanotum broadly rounded, closely reticulated ; the base with 2 small square areae in the centre. Mesonotum closely, somewhat strongly transversely punctured ; the scutellum closely reticulated, the reticulations more regular and half the size of those on the metanotum. The antennal scape reaches to the lower ocellus. Propleuræ somewhat strongly, irregularly striated. Mesopleuræ aciculated, the oblique furrow closely striated. Meta-pleuræ irregularly punctured, the lower half more strongly than the upper. Male. Length, 3 m.m.

Trismicra oiketicusi, sp. n.

Black, with the following parts orange yellow : the antennal scape except above, the face, clypeus above the eye orbits narrowly, the apex of pronotum, except for a black transverse mark, narrowed on the inner side, the top and base of propleuræ, 2 oblique lines in the centre of the mesonotum, commencing near the base and extending to the apex ; a curved line on the sides, commencing near the base and at the apex reaching near to the central lines, it being narrowed on the inner side ; tegulæ, a small spot on the side of the scutellum at the base, its sides broadly, the black central mark narrow at the base, becoming gradually roundly widened, then narrowed to a point at the apex, where it is twice the width of the base ; this central mark is followed and joined to a transverse line which reaches near to the outer edge and 2 anterior and one central mark on the base of the mesopleuræ below the tegulæ. Legs black ; the apex of the 4 anterior femora behind, broadly in front, the 4 anterior tibiæ in front, the tarsi, the hind coxæ, an irregular, broad line on the top of the basal half of the hind femora, a small spot on its apex above, one on either side of the apex, both pyriform, the inner the larger and with its apex more distinctly narrowed. Wings hyaline, the nervures fuscous. Female. Length, 7 m.m.

The 3 teeth are on the apical half of the femora ; they are large, oblique the apical shorter, thicker and dilated at the apex. Apex of scutellum bluntly rounded, margined, crenulated inside the margin. Abdominal petiole fully twice longer than wide. Pro and mesonotum with scutellum rugosely punctured ; the metanotum areolated ; there are 2 small basal triangular areae in the centre, followed by 2 large, wider than long irregular oblique ones, followed by a small semicircular one ; the others are smaller, more irregular. There are obscure yellow transverse lines on the sides of the 2nd, 3rd and penultimate abdominal segments. The upper half of the propleuræ is finely striated, the lower smooth, the upper two-thirds of the mesopleuræ more strongly striated, the base strongly punctured, the rest smooth.

Tetrasmicra longispina, sp. n.

Yellow, the antennæ above, the scape more narrowly than the flagellum, a line running down down from the ocelli to the antennæ, occiput except round the edges, a line, narrowed above, in the centre of the pronotum, the base of the mesonotum to near a broad line, slightly narrowed towards the base, running from the basal line to the scutellum, more than the inner half

of the lateral lobes, a semicircular mark on the lobe at the sides of the base of scutellum, a minute spot at the base of the scutellum laterally, a line down the middle of the scutellum, the basal half of equal width, it then becomes slightly dilated, then dilated into a semicircle which fills the apex of the scutellum, the 2nd and following dorsal abdominal segments bear broad transverse bands, the apex of the hind coxæ, broadly above, narrowly below, a line on either side of the femora above, the inner shorter and broader than the outer, incised at the apex, dilated on the lowerside at the base, a spot between the basal tooth, extending to the middle between it and the 2nd, narrowed on the outerside below, rounded above and reaching near to the apex, a semicircular mark on the apex, united to the mark on the innerside, and the teeth, except the base of the middle 2, narrowly, and the basal half of the apical, the basal fourth and apical of the hind tibiæ and the apical joint of the hind tarsi, black. Lower side of flagellum fuscous. Wings hyaline, the nervures black. Male. Length, 6 m.m.

Potaro, May. D.F.

Densely covered with white pubescence—Pro-mesonotum and scutellum umbilically punctate scutellum bluntly bilobate, the space between the lobes smooth, depressed. Metanotum with 4 areæ of almost equal size and longer than wide on the 2nd row; there are 4 wider ones round the apex. Propleuræ smooth. Mesopleuræ raised to a keel in the middle, the sides on either side obliquely sloped; smooth above, reticulated below. The raised centre of the metapleuræ reticulated, the base and apex smooth. The femoral teeth are long, oblique, the basal 3 sharp-pointed and become gradually shorter as does also the space between them; the apical is shorter, thicker and more rounded.

Tetrasmicra crocata, Walker.

Smicra crocata, Walker, Trans. Ent. Soc. 1864, 186.

Tetrasmicra crocata, Ashmead, Mem. Cairn. Mus. i, 456; Pl. XXXII, f, 2.

A female agrees fairly well with Walker's description and with Ashmead's figure, *l.c.*

Hexasmicra microspila, sp. n.

Yellow, the upperside of the antennal scape, a small spot, twice longer than wide, on the lateral lobe of mesonotum, a line on the centre of the basal three-fourths of the scutellum, faint at the base, gradually widened, but not much towards the apex, and the femoral teeth, black; the antennal flagellum reddish brown, black above; the back of the abdomen infuscated; Rings hyaline, the nervures, fuscous. Apex of scutellum margined, broadly bilobate. Metanotum with 3 rows of areæ, the basal irregular, narrowed towards the centre of the metanotum; there are 6 areæ in the centre, the middle 4 square, the outer smaller and roundly narrowed on the inner side; there are 6 apical areæ, the outer larger, wider and more regular than the central; the apex has an area almost twice longer than wide, rounded above, in the centre.

The basal 2 teeth on the femora are separated by double the distance the others are from each other ; the 2nd from the base is smaller than the others ; the 3rd and 4th are the longest ; all are oblique. Pro- and mesonotum transversely rugosely punctured ; the scutellum closely reticulated ; its apex in the middle behind the apical keel depressed, bordered laterally by 3 or 4 keels. Pro- and mesonotum thickly covered with black, the scutellum and mesonotum with longer white pubescence. Pro- and mesopleuræ smooth, the latter with 2 oblique furrows, the lower one the longer ; both strongly striated. Abdominal petiole twice longer than wide ; the abdomen as long as the head and thorax united ; gradually narrowed from the middle to the apex. Female. Length, 9 m.m.

Heptasmicra lycaenæ, sp. n.

Yellow, the mesonotum and scutellum slightly darker coloured, the antennal scape above, the flagellum, the centre of the hollowed central part of the front, the black extending shortly behind the anterior ocellus, the occiput, a large roundly bifurcated mark, united at the base by a narrower line and united to the scutellum by a still thicker line, slightly narrowed at the base ; a wide transverse line at the base of the scutellum, a line down the sides of the latter at the base, narrowed above, and not reaching to the top, a mark on the inner side of the outer lobe, becoming gradually widened to shortly beyond the middle, then narrowed towards the apex, a longish triangular mark in the centre of the scutellum, the narrowed end at the base, the apex rounded, the depressed base of the mesopleuræ, a large transverse mark, narrowed inwardly, on the outer side of the 2nd abdominal segment and lines on the apices of the 3rd, 4th and 5th, widened on the outer edge and united down the middle by a narrower line, the whole of the 6th, the apex of the hind coxæ, the mark narrowed in the centre, a line, 4 times longer than wide, narrowed at the base and apex on the outer side of the hind femora above, nearer the base than the apex, a large mark, between the basal 3 teeth, extending across to the middle, where it is slightly narrowed towards the middle on the inner side, a smaller, wider mark, widened and rounded above, an oblique squarish mark on the apex on the inner side and a semicircular one at the base below, close to the teeth and the basal and apical fourth of the hind tibiæ, black. Femoral teeth longish, stout, the basal 3 slightly smaller than the others. Apex of scutellum broadly rounded. Metanotum regularly closely areolated ; there are 3 rows of areæ ; there are 2 large central, wider than long, on the 2nd row ; narrowed at the apex in the centre ; this indentation is closed at the apex by a keel ; it is followed by a large, wider than long, area. Abdominal petiole short, twice longer than wide. Male. Length, 6-7 m m.

Bred from Lycaenid, *Tmolus palegon*.

Heptasmicra curvilineata, sp. n.

Reddish yellow, the flagellum of antennæ black, fuscous below the lower part of the occiput, the basal three-fourths of the central lobe of mesonotum, a semicircular mark on the lateral lobes, narrower than the outer part, a

transverse line, transverse at the base, rounded at the apex, next to the scutellum, a transverse line, rounded at the apex, before the apex of the scutellum, an obscure line at the base of the metanotum, a broad curved line on the basal half of the hind coxæ, nearer the outer than the inner side, a curved line on the lower part of the hind femora, commencing at the middle of the basal 2 teeth and extending to the apex, the apices of the teeth and the under side of the hind tibiæ with the spurs, and distinct bands on the apices of the basal 4 abdominal segments and the apex of the ovipositor, black; wings hyaline, the nervures pale fuscous. Female. Length, 11 m.m.

Basal femoral tooth long, thin, curved, the 2nd minute, widely separated from it, the others irregular, the 3rd slightly smaller than the apical 4 which are of about the same size. Apex of scutellum projecting into a leaf-like plate, the apex of which is broadly roundly incised Metanotum with 2 large central hexagonal areas; a small hexagonal one on the sides at the base; there is a rounded keel at the base, at the apex of the large areas at the inner sides of which, shortly beyond the middle, are 2 short broken keels. Abdomen not much longer than the head and thorax, the petiole not much longer than wide. Basal slope of pronotum pitted with shallow punctures, the apex, mesonotum, and scutellum umbilically punctate—Propleuræ smooth; the base of the mesopleuræ smooth, the depressed centre closely striated, the apex and the metapleuræ umbilically punctate.

Ceratismicra flavescens, sp. n.

Pallid testaceous, the face, pronotum, sutures of mesonotum, basal half of scutellum and the pleuræ, paler, more yellowish in tint; the dilated part of the abdomen rufo-testaceous, wings hyaline, the nervures fuscous; the femoral teeth black, the basal bluntly triangular; they are about 13 in number, the apical closely pressed together; there are no areas on the metanotum; it has a not very clearly defined, central keel and a curved one round the apex; on its sides is a broad keel, dilated at the apex, followed by a broadly rounded tooth. Abdominal petiole more than half the length of the thorax, not quite so long as the rest of the abdomen and about two-thirds of the length of the hind coxæ; abdomen as long as the thorax. Smooth, shining, sparsely covered with a white pubescence. Male. Length, 3 m.m.

The middle of the antennæ reaches to the ocelli; the apical half is thicker than the lower and is dilated towards the apex.

Ceratismicra? variventris, sp. n.

Black, the antennal scape, a broad line, narrowed above and below—more acutely and longly above than below—on the inner orbits and the abdominal petiole yellow; the rest of the abdomen and the legs red, the apices of the 4 anterior coxæ and femora and the base of the femora in front pallid yellow. the tarsi testaceous, the hind tibiæ fuscous, dark testaceous on the basal half; there are 16 or 17 short black femoral teeth. Abdominal petiole half the length of the thorax and two-thirds of the length of the hind coxæ. Wings hyaline, the nervures black. A stout reddish keel runs down from the lower

part of the front to the clypeus, it becoming narrowed below, the clypeus, labrum and mandibles dark red. A stout keel runs down the basal half of the metanotum in the centre; it then bifurcates to the outer edge of the apex; the inner half of the base is shagreened, the outer edge bears stout irregular transverse striæ. Female. Length, 5 m.m.

Thickly covered with short white pubescence. The vertex, sides of front and the face strongly, but not closely punctured; the frontal depression finely, closely transversely striated. Basal slope of pronotum transversely aciculated, punctured sparsely round the edges. Mesonotum and scutellum strongly, closely punctured; the latter gradually narrowed from the base to the apex; its sides furrowed. The sides of the metanotum are broadly rounded, without teeth. Propleuræ aciculated, the upper half depressed, finely, closely striated at the apex; there is a longish oval fovea on the lower basal part. Mesopleuræ raised to a point in the centre, the basal slope smooth, the apical with oblique irregular striæ, the top at the base and the lower part at the apex with short striæ, the top with the striæ more regular and distinct than the lower edge; the centre below forms a triangle and is strongly punctured.

This is not a typical *Ceratismicra*, the metanotum not being toothed laterally, nor is the antennal scape dilated above. The latter is long, slender and extends clearly above the top of the vertex.

Sayella quadrilineata, sp. n.

Pallid yellow, the ocellar region, occiput except at the eyes, 3 broad lines down the mesonotum, the central of equal width, a line, slightly narrower than that on the middle of the mesonotum, down the middle of the scutellum, a narrower line round the base of the metanotum, the lower parts of the meso and metapleuræ broadly, and the apex of the 2nd and the whole of the following abdominal segments, black, the black on the abdomen of a deeper tint than on the thorax; legs: the 4 anterior whitish yellow, the femora slightly infuscated in the middle, the hind legs rufo-testaceous, the apical fourth of the coxæ, an irregular spot on the outer, apical part of the femora, the base and apex of the tibiæ, and the tarsi whitish yellow; the femoral teeth small, black, about 16 in number, the basal about twice the size of the next. Parapsidal furrows deep. Apex of scutellum broadly rounded. Base of metanotum with a moderately broad striated belt, the striæ stout and clearly separated; this is followed by a row of small areæ, those in the centre square; the outer of these not clearly separated; next, on either side, are 2 areæ, the outer the larger, rounded on the outer side, the inner much narrowed towards the outer, apical side; next are 2 larger areæ, the inner, or central much the larger, twice longer than it is wide at the apex, the base gradually rounded to a point, projecting into the 3rd row of areæ, the outer is large, as long as it is wide at the apex, which is rounded inwardly. Metapleuræ widely, irregularly reticulated. Abdominal petiole nearly as long as the thorax and almost twice the length of the rest of the abdomen; it is dilated beyond the middle,

the apex itself being narrowed, its base below is bordered by two triangular teeth. Wings hyaline, the nervures pallid. Male. Length, 3 m.m.

Apex of pronotum, mesonotum and scutellum closely reticulated-punctured; the middle lobe in the middle more or less transversely striated. There is an oblique depression, widened below, in the middle of the propleuræ.

Bred from the larva of a plume moth (Pterophorid.)

PERILAMPIDÆ.

Perilampus caeruleiventris, sp. n.

The frontal depression, cheeks, face, clypeus malar space outer orbits, the meso-metapleuræ the sternum dark blue, the back of abdomen of a still darker blue, its sides and ventral surface of a brighter blue than the head; the sides of the front and vertex brassy firey red; the pronotum, mesonotum and scutellum closely, regularly reticulated, the depressed part of the reticulations dark blue, the borders of the reticulations of a dark purple, the mesonotum at the apex smooth, dark purple on the inner half of the middle lobe. Pleuræ smooth, a wide crenulated border on the base of the propleuræ; the base of the propleuræ reticulated, the apex near the middle with 3 irregular foveæ; a curved line of large foveæ on the base of the mesopleuræ; there is a curved, crenulated furrow on the apex, angled towards the middle on the apex; the upper part is narrower and much shorter than the lower; there is a wide furrow on the upper two-thirds of the base of the metapleuræ formed of foveæ, and there are foveæ on the upperapical part. The scutellum is a little longer than it is wide at the base; the sides and apex are margined below; on the sides of the base is a large smooth triangular space, the narrowed end on the inner side. The abdomen is sparsely covered with white hairs. Legs (especially the tibiæ) densely covered with white hair.

EUCHARINÆ.

Kapala cuprea, sp. n.

Dark coppery, the dilated apex of the abdomen dark blue, the antennæ fulvo-testaceous the legs, except the coxæ, pale testaceous, the outer apical half of the mandibles dark rufous, the palpi dark testaceous; wings hyaline, the nervures, dark fuscous. Male. Length, 5 m.m.

Face and clypeus with violaceous tint; the centre of the face roundly raised, smooth; the clypeus smooth, with a large oblique fovea on either side above; the sides of the head from the edge of the occiput to the malar space obliquely striated, the striæ strong above, becoming gradually finer and closer below where they curl round the eyes. The antennal rami are densely covered with short fuscous hair. Malar space a little longer than the eyes. Middle lobe of mesonotum strongly longitudinally striated, the striæ uniform and clearly separated; the outer lobes much more finely striated at the base and on the inner side, the rest smooth. Scutellum strongly, closely

longitudinally striated; the metanotum more finely and closely than it; the striæ on the forks stronger and curved; the space at the apex between them has 2 stout keels on either side and a finer roundly curved one at the apex; there are some broken keels between. The central part or the lower region of the metanotum is finely, closely punctured. Upper part of propleuræ densely covered with a longish white pile; below is a stout curved keel, with a curved depression above; on the upper central part of the mesopleuræ are some fine curved longitudinal striæ; below are 2 long upper and 2 shorter lower keels. Abdominal petiole twice the length of the hind coxæ.

Holcokapala, gen. n.

Female. Antennæ short, stout, 10-jointed, the 3rd, 4th and 5th antennal joints longer than wide, of equal length; the last conical, longer than the preceding. Mesonotum transversely striated; the scutellum smooth, a wide deep furrow, widened towards the apex; the processes stout, extending close to the apex of the abdomen, curving and converging at the end. Metanotum with an oblique slope, smooth. Abdominal petiole about 3 times longer than wide and as long as the hind coxæ. Apex of clypeus margined, transverse, the sides rounded; the sides above are foveate. Malar space as long as the eyes. Ocelli in a line. Head striated above; it is bare; the thorax pubescent; parapsidal furrows distinct; the middle lobe of mesonotum has a shallow furrow down the middle. Pleuræ almost smooth.

Comes near to *Lasiokapala*, which has the head and scutellum processes smooth, the latter long and extending beyond the apex of the abdomen.

Holcokapala striaticeps, sp. n.

Black, the mandibles, antennæ and the 3rd and following segments of the abdomen rufo-testaceous; palpi dark testaceous; legs, except the coxæ, yellowish testaceous; the basal part of the abdomen has a blue tint; wings hyaline, the nervures pale testaceous. Female. Length, 4-5 m.m.

Sides of front and vertex finely closely longitudinally striated, the striæ curving outwardly below, the striæ on the malar space stronger, somewhat rounded and transverse, the outer orbits longitudinally striated. Basal part of mesonotum strongly irregularly striated, more closely and regularly on the base than on the apex; the apical part is smooth as is also the scutellum. The processes are stoutly striated from the base to the apex. Metanotum smooth, its sides bordered by keels which roundly curved and unite at the bottom below. Propleuræ excavated, bordered by a rounded keel near the top. Mesopleuræ irregularly weakly longitudinally striated; the lower apical part is much more finely and regularly striated; the mesosternum is bordered by a weakly crenulated furrow, and there is a vertical one on the base of the apical fourth, commencing near the top. Metapleuræ irregularly reticulated.

Dicælothorax parviceps, sp. n.

Black, the 2nd and 3rd segments of the abdomen tinged with violaceous; the mandibles, antennæ and the greater part of the 4th and following abdominal segments rufo-testaceous, the apical half of the femora, tibiæ, tarsi

and a narrow line on the inner side of the scutellum process whitish testaceous; the basal half of the femora tinged with fuscous on the outside. Wings hyaline, the nervures fuscous. Female. Length, 4 m m.

Head opaque, coarsely shagreened, the sides of the vertex almost reticulated; frontal depression moderately wide and deep, the sides keeled, the top rounded, enclosing the front ocellus. Temples short, the occiput oblique. Malar space distinctly longer than the eyes. The head is short and is clearly narrower than the thorax. Prothorax smooth, the upper apical part of the propleuræ with a few obscure striæ; the base with a sharp slope, margined round the edges, narrowed to a point above. Mesonotum striated, the striæ clearly separated, the top depressed in the centre, smooth, obliquely narrowed from the top to the middle, where it is deepest. Scutellar process extending to the apex, of the 3rd abdominal segment, of equal width to the apex, which is oblique; they are closely, strongly regularly longitudinally striated, are slightly depressed in the middle above. Metanotum smooth, the sides keeled, a stouter keel down the middle, it has a straight, oblique slope. Abdominal petiole twice the length of the hind coxæ.

The form of the scutellar process is different from what it is in the type of the genus—*platycerus* Ashm., Mem. Cairn. Mus. i, Pl. XXXV., f. 3,—it being in that species much wider, bulging out in the middle and rounded at the apex, not of equal width and obliquely truncated at the apex. There seems to be also a radical difference in the relative lengths of the antennal joints, but I am not sure that I understand the description given

TORYMINÆ.

Torymus guyanaus, sp. n.

Antennal scape fulvous, the flagellum black, the basal joints fuscous. Head green, tinged with blue on the top and outer orbits, covered with short, white pubescence. Mandibles dark fulvous, the teeth black. Face covered with round, distinctly separated large punctures; sides of front finely closely, irregularly striated. Vertex aciculated; a distinct, clearly defined furrow runs down, slightly obliquely on either side of the middle, to the antennæ. Prothorax finely distinctly aciculated, broadly purple in the middle, the base and apex green. Mesonotum green, the base and apex largely purple; the parapsidal furrows distinct; the central division coarsely aciculated, the lateral lobes finely reticulated, more strongly on the apex than base. Scutellum closely aciculated, the basal three-fourths with scattered punctures—Pro- and mesopleuræ aciculated, almost punctured, the former largely purple above. Metapleuræ smooth. The pubescence on the thorax is sparse and white. Abdomen mostly blue largely variegated with violaceous and purple tints. Four front coxæ violaceous, the middle blue at the apex, the hinder dark green; all are closely distinctly punctured; the four front femora brown, testaceous at the base and apex, as are also the trochanters, the hinder femora green, the base, apex and lower side purple; the apex of the femora and the tibiæ testaceous, the hinder

tibiæ with more than the apical half fuscous behind, the apex fuscous all round; the tarsi are of a paler, whitish testaceous colour. Wings clear hyaline, the nervures whitish testaceous; they are very iridescent. Female. Length, body and ovipositor, nearly 2 m.m.

The legs are densely covered with longish white pubescence; the sheaths of the ovipositor densely with stiff black pubescence. The abdominal segments are fringed with white hair. The apex of the scutellum being smooth, not punctured like the rest, makes this species almost a *Syntomaspis*, but on the whole it seems to be a *Torymus*.

Syntomaspis loranthi, sp. n.

Green with brassy tints, the 2nd and following segments of the abdomen dark violaceous, the antennal scape and the 1st joint of the flagellum dark fulvous; the four front legs rufo-testaceous, their coxæ, trochanters and the greater part of the femora fuscous, almost black, the hind coxæ, trochanters and femora green, the apex of the femora, tibiæ and tarsi rufo-testaceous; wings clear hyaline, the nervures pallid testaceous. Male. Length, 2 m.m.

Head finely, closely reticulated, the occiput smooth. Pronotum in the centre brownish, closely aciculated, a fine keel down the middle, the base and sides with scattered punctures. Mesonotum strongly umbilically punctate, clearly trilobate, the apex brassy. The basal part of scutellum less strongly and more closely umbilically punctate than the mesonotum; the apical division in the middle finely closely punctured, the sides closely, rather strongly obliquely striated, the two divisions clearly separated. Metapleuræ smooth. Upper part of propleuræ irregularly, strongly punctured, the rest strongly aciculated; the raised central part of the mesopleuræ closely, distinctly punctured. Metapleuræ smooth. Abdomen smooth and shining. Coxæ closely, distinctly punctured. Bred from gall on "bird vine" (*Loranthus*).

EURYTOMIDÆ.

EURYTOMINI.

Eurytoma guianaensis, sp. n.

Black, covered with white pubescence, the antennæ dark testaceous, covered with white pubescence, the legs whitish testaceous, the femora distinctly tinged with rufo-fulvous; the ventral surface broadly rufous; wings hyaline, the nervures whitish yellow, as are also the tegulæ. The metapleuræ more densely pilose than the rest of the thorax. The hypopygium largely projects, as does also the sheath of the ovipositor. Head and the thorax above closely umbilically punctate, the propleuræ finely, closely, longitudinally reticulated. Basal part of mesopleuræ finely, closely reticulated, the apical shining, smooth above, the lower part finely, closely striated, the apex crenulated. Metapleuræ apparently alutaceous, but the sculpture almost hidden by the dense longish hair. The apical two-thirds of the 2nd segment and the following are aciculated and covered with white pubescence, especially at the apices. Female. Length, 2 m.m.

The pedicle of the antennæ is bare and shining, twice longer than wide, narrowed at the base and thinner than the next, which is the longest and two and a half times longer than wide, the others are shorter, longer than wide. Parapsidal furrows distinct on basal half of mesonotum. only.

Eurytoma couridæ, sp. n.

Black, the antennæ, head, thorax and legs densely covered with white pubescence, the antennæ and legs rufo-testaceous, the tibiæ and more especially, the tarsi paler, whiter than the femora, the apical ventral segments piceous; wings hyaline, the nervures pallid testaceous. Head and thorax above closely umbilically punctate, the head more finely than the thorax, the pronotum more finely than the mesonotum and the latter somewhat more finely than the scutellum. Propleuræ finely, closely obliquely reticulated, as is also, but more finely and obliquely, the mesopleuræ, except at the base and apex above, which are smooth and shining. Metapleuræ apparently alutaceous, but the sculpture is hidden by the dense pubescence. Abdomen entirely smooth and shining. Female. Length, 1.5 m.m.

Eurytoma leuconeura, sp. n.

Black, the head, thorax and legs densely covered with white pubescence, the fore legs, except the coxæ and base of femora, the middle, except the coxæ and basal two-thirds of the femora and the hinder, except the coxæ, trochanters and the femora except narrowly at the apex, rufo-testaceous, the hind tibiæ infuscated; wings hyaline, the nervures and stigma white. Male. Length, 3 m.m.

Head and thorax umbilically punctate; the orbits bordered by a row of foveæ. Propleuræ closely, coarsely aciculated, almost punctured; there are two or three foveæ on the apex above. Basal half of mesopleuræ closely, finely reticulated, bordered behind; the apex irregularly obliquely striated. Metapleuræ closely, rugosely reticulated. Abdominal petiole opaque, aciculated, as long as the hind coxæ. The hairs on the antennæ are clear white and are as long as the joints. Female.

Lisseurytoma, gen. nov.

♂ Antennæ 10-jointed the scape long, slender, extending above the head, the annellus one-jointed, longer than wide, narrowed at the base, the apical three joints slightly thickened, the 3rd and 4th subequal. Malar space about one quarter longer than the eyes, a narrow, but distinct furrow down it. Head wider than the thorax; occiput not margined. Ocelli in a curve. Pronotum three-fourths of the length of the mesonotum, which has distinct furrows; the latter are placed near the sides so that the middle lobe is much larger than the lateral. Scutellum large, flat, longer than wide, not narrowed at base and apex, a distinct furrow on either side of the middle. Metanotum with a longish, rounded slope, irregularly reticulated. Abdomen shorter than the thorax, longish ovate, the base broader than the apex which is sharply pointed. Wings unspotted, the stigma branch of equal width, much longer than the post-marginal, which is very short; marginal vein very long,

longer than the basal which is much thinner than it and runs into and above its upper part at the costæ. Hind tibiæ with two spurs—5th abdominal segment slightly shorter than the 4th; the thorax is at the most shagreened; the abdomen smooth and shining. The antennæ are inserted well upon the head, distinctly nearer the ocelli than the mouth.

In the arrangement of Ashmead (Mem. Cairn. Mus. i, 262), this genus runs near to *Xanthosoma*. Its characteristic features are the smooth body, long slender antennal scape projecting largely above the head, the large scutellum of equal width and bearing two furrows, the long marginal and short post-marginal.

Lisseurytoma nigricornis, sp. n.

Testaceous, the flagellum of antennæ, tips of mandibles and apical joint of antennæ black; wings clear hyaline, the nervures fuscous—smooth, shining bare, except the flagellum which is covered with stiff longish black hair. Antennæ as long as the head and thorax united. Female. Length, 2 m.m.

Bred from pupæ found in fruit of *Cardiospermum halicacabum*, Probably the host was one of the fruit feeding Diptera.

Bephrata maculicollis, sp. n.

Black, densely covered with white pubescence, the sides of the front, the mark continued along the orbits to the middle of the top of the eyes, it becoming gradually narrowed above, the face except in the centre, oral region, the lower three-fourths of the outer orbits, malar space, mandibles except the teeth, the prothorax, except three large marks on the pronotum, the central extending from the base to the apex, the lateral not commencing at the base, the abdomen and legs, fulvo-testaceous, the abdomen darker coloured, the apical segments almost black, the coxæ and femora are fuscous for the greater part; the tibiæ and tarsi are densely covered with white pubescence; the abdominal segments are fringed with long white hair. Antennal scape and the 2nd joint of flagellum testaceous, the rest black, brownish below; the 3rd joint about one third longer than the 4th. Wings hyaline, a large fuscous cloud in the centre, extending to the end of the stigmal branch; the basal nervures black, those in the cloud fuscous; the costæ has the apical third thickened, bullated at the end. Head and thorax coarsely umbilically punctate, the punctures on the metanotum larger, forming reticulations. Malar space longer than the eyes; the occiput margined—The black central part of the face is smooth, bare, shining and with a smooth keel down the middle. Clypeus smooth, bordered by an obscurely crenulated furrow. Collar large, but shorter than the upper part of the head. Scutellum longer than wide, the apex ending in two bluntly rounded projections. The sides of metanotum are broadly rounded. Female. Length, 8 mm.

The abdomen is compressed; its base is broadly rounded above, projecting above the thorax; from this raised part, becomes gradually narrowed.

DECATOMINI.

Decatoma couridæ, sp. n.

Black, the antennæ, the sides of pronotum, slightly more broadly than the black central part, which is somewhat narrowed at the base and the upper third of the propleuræ, the mark on the latter longer at the base and apex, through the black colour of the lower part projecting upwards in the middle, yellowish testaceous, the four front legs whitish testaceous, the two anterior femora black entirely on the basal half; above the black projects beyond the middle, the middle femora are more broadly black, their tibiæ black, except at base and apex; hind legs black, the trochanters, base and apex of tibiæ and the tarsi white; wings hyaline, the stigma black, the other nervures pale, the cloud oblique, three times longer than wide, fuscous. Female and Male. Length, 2 mm.

Bred from galls on *Courida* leaves.

Head aciculated, the lower part in front from the middle of the eyes much more strongly so, almost punctured. Pro- and mesonotum umbilically punctate. Scutellum umbilically punctate at the base, the rest rather strongly transversely striated. Metanotum irregularly reticulated. Pro- and mesopleuræ aciculated, the raised, central part of the mesopleuræ irregularly striated. Metapleuræ rugosely reticulated. Abdominal petiole in female 3 times longer than wide; the abdomen smooth and shining, shorter than the thorax. The antennal pedicel is longer and thinner than the next four which are more ovate; the apical joints form a club.

Prodecatoma couridæ, sp. n.

Yellowish testaceous, three spots, the central the larger on the occiput, an irregular mark, wider than long, on the mesonotum, a longish triangular spot, the narrowed end at the base, on the centre of the scutellum, a trilobate mark, the lateral lobes shorter and rounder than the central, which is narrowed at the apex, black; wings hyaline, the nervures testaceous. Abdominal petiole thick, about four times longer than wide, half the length of the rest of the abdomen. Antennæ short, about twice the length of the width of the head, thickened towards the apex, the 3rd joint thinner and longer than the others, one-half longer than the 4th, which is a little longer than wide, the others, except the last, wider than long. Thorax above weakly umbilically punctate; the metapleuræ irregularly reticulated densely covered with white pubescence. Head almost smooth; malar space three-fourths of the length of the eyes. Female. Length, nearly 2 mm.

Bred from galls on leaves of *Courida*. Abdomen shorter than the thorax. Stigma testaceous, the nervures white.

Prodecatoma latilineata, sp. n.

Yellowish testaceous, a broad, black line on the vertex across the ocelli, obliquely narrowed laterally, a broad line down the centre of the entire body, broader on the mesonotum than on the metanotum and narrowed at the base

and apex there covering the top part of the petiole and extending on to the sides of the rest of the abdomen, broadly so on the middle segments, the lower part of the occiput and the base of the prothorax as well as a small spot on the outer side of the hinder femora and almost the apical half of the hind tibiæ and the apical joint of the tarsi are black. Antennæ coloured like the body, the apical half of the scape and the pedicel black above, the apical joint fuscous the hairs about as long as the joints, white. Male. Length, 2.5 mm.

Bred from galls on leaves of *Smilax*.

Face strongly, closely striated, the striæ roundly converging towards the mouth and extending on to the inner half of the malar space. The rest of the head umbilically punctured, as is also, but more strongly, the upper part of the thorax. Pro- and mesopleuræ almost smooth, the metapleuræ rugosely punctured, densely covered with white pubescence. Abdominal petiole longer than all the rest of the abdomen and about half the length of the abdomen. The pedicel of the antennæ is transversely oval, wider than long, there is a triangular incision between 3rd and 4th and the 5th and 6th joints, the 3rd joint is shorter than the 4th, the last slightly longer than the penultimate. Malar space as long as the eyes, furrowed.

CLEONYMIDÆ.

Lycisca rufipes, sp. n.

Antennal scape dark green, largely tinged with brassy tints, the flagellum black. Head green, largely marked with brassy tints, the vertex and the greater part of the front dark purple, the mark on the front narrowed below, leaving a longish triangular spot at the orbits, its narrowed end above. Face, clypeus and to a less extent, the malar space densely covered with silvery white pubescence. Malar space about half the length of the eyes; a narrow, oblique brassy furrow outside its middle. Prothorax green, largely brassy, a small purple spot on the centre near the apex. Mesonotum more bluish in tint, the middle lobe dark purple. Scutellum firey red except for a small greenish spot in the centre of the apex. Pleuræ green, tinged with blue; the base and apex of the propleuræ below brassy; there is a large firey red depression on the upper part of the mesopleuræ, gradually narrowed to a finer point at the apex, the lower side broadly rounded. Basal slope of 1st abdominal segment green, the rest of it, the whole of the 2nd the 3rd—except for an oval longish mark on the sides of the apical half the 4th with a large conical mark, filling the segment except at the sides and apex, dark purple, the 5th brassy, the 6th dark purple; the basal ventral segment dark purple, the others green except for triangular marks on the sides of the 3rd and 4th. Legs red, the basal half of the hind tibiæ and the hind tarsi fuscous. Wings hyaline, a small cloud at the end of the submarginal and a smaller one at the end of the stigmal; the nervures black. Female. Length, 7 mm.

Strongly umbilically punctate, the thorax more strongly than the head the scutellum somewhat more strongly than the mesonotum. Metanotum areolated widely; the central keel is straight, the two bounding it are roundly

curved outwardly, making the area wider at the apex than at the base; outside them is a large semicircular area, its base as wide as the base of the inner two united; it is bordered by a narrower oblique area, which is narrowed towards the apex and bears the oval spiracles at the base. Upper part of the propleuræ punctured like the pronotum, the lower part finely irregularly striated. Mesopleuræ strongly closely, but not umbilically punctured, the upper part with a smooth, shining area, narrowed near the centre, the base more sharply pointed than the apex; the mesosternum strongly rugosely punctured, bordered laterally by a crenulated furrow. Basal slope of 1st abdominal segment smooth, its apex and 2nd segment finely and closely punctured; the others much more strongly punctured; the ventral surface is not so strongly, nor so closely punctured as them. The ædigus has two long lateral processes, dilated at the apex. Male. Length, 7 mm.

Except on the face the pubescence is sparse. There is a distinct, narrowed rounded projection on the lower part of the apex of scutellum; it is hollowed above and with a narrow furrow in the centre, and purple violaceous in colour.

MOORELLA, gen. nov.

Antennæ placed close to the mouth, the scape long, reaching to the ocelli; 13-jointed, the apical 3 joints forming almost a club. Eyes large, converging above. Ocelli in a large triangle, the hinder close to the eyes. Occiput transverse, the temples, short. Malar space two-thirds of the length of the eyes. Pronotum large, narrowed towards the base, the middle as long as the mesonotum, which is slightly wider than long; a narrow transverse line at its base. Scutellum large, triangular, a curved furrow at its base, separating the base from the main part. Abdomen as wide, but shorter than the thorax, sessile. Four anterior legs normal; the hinder very long, longer than the body, the tibiæ longer than the basal 3 joints united, compressed laterally, and widened, the base narrowed, the top broadly rounded, slightly narrowed towards the apex; on the outer side they are hollowed, the hind spurs are short, thick, the middle long almost as long as metatarsus; the metatarsus is not quite so long as the other joints united. Submarginal nervure long, the marginal short and thickened forming a stigma, the post-marginal long, becoming narrowed towards the apex, it is indistinctly defined compared with the other nervures; the stigmal branch is straight, oblique, of equal width throughout; there is a large cloud in the middle of the fore-wings.

The mesopleuræ are bordered below by a broadly rounded furrow which extends from the base to the apex; the mesosternum has a wider furrow down the middle. The abdominal segments are transverse; the hypopygium longish, cultriform. The middle coxæ are not swollen or enlarged; the anterior are larger and longer the single spur on the middle tibiæ is about three-fourths of the length of metatarsus. I can only, for the present, refer this genus to the *Cleonymidæ*, but not to any of the tribes included in that group. It may be referred to a new sub-family in it. The discovery of the male may throw some light on its systematic position. The peculiar

structure and great length of the hind legs should make the genus easily recognisable.

The genus is dedicated to Mr. Harold W. B. Moore, formerly of the Guiana Museum, who has reared most of the parasite Hymenoptera described in these papers.

Moorella fulviceps, sp. n.

Black, the head fulvous, the pronotum of a paler fulvous colour, the propleuræ pale testaceous, the base and apex of the abdomen, the former on the basal segment all round and the latter much more narrowly on the apical white segment; antennæ testaceous, the scape paler, more yellowish in colour; anterior legs whitish, the coxæ and trochanters of a clearer white, the middle pair fuscous, the hinder black, the apical three-fourths of the 1st joint of the tarsi, and the whole of the 2nd to 4th white, the 5th fuscous. Wings hyaline, the submarginal nervure fuscous, the others black, a large fuscous cloud, commencing at the stigma where it is narrowed and extends to the hinder margin of the wing; the base is almost straight, the apex broadly rounded. Covered with a white microscopic pile; smooth and shining, the apex of the mesonotum and the scutellum finely, closely punctured, the latter with a few punctures in the centre. Mesopleuræ opaque, bare, almost aciculated. Female. Length, 1.5 mm.

The hind tarsi are one third of the length of the tibiæ. The wings are pilose and distinctly ciliated round the outer margin.

ENCYRTIDÆ.

EUPELMINÆ.

Phlebopenes albopilosellus, sp. n.

Metallic green, the lateral lobes of the mesonotum broadly dark purple, the back of the abdomen broadly of a brighter purple, the centre of the front below, the lower lateral part of the face, a line on the inner side of malar space, the basal half of the scutellum, the parts bordering it, post-scutellum, the sides of metanotum and a large irregular mark down the middle of the mesopleuræ dark indigo-blue the mesonotum in front, the pleuræ, mesosternum and sides of abdomen with brassy tints; legs black, the femora and more particularly the hinder, green, the hind tibiæ at the base with a white ring, as long as the hind spurs. Wings hyaline, the centre of the anterior with fuscous streaks, the nervures black. Female. Length, 11 mm. terebra, 24 mm.

Antennal scape dark green, narrowed to a point in the centre below, distinctly keeled there. Face raised slightly in the centre, bordered by shallow furrows which converge slightly above; finely, closely punctured, the sides irregularly transversely striated. Front and vertex finely closely punctured. The raised central lobe of the mesonotum is finely closely transversely striated; the raised, basal central lobe is more strongly striated, especially on the sides at the base; the scutellum finely striated, becoming stronger towards the apex; the outer edge of the mesonotum is raised into a keel, inside of which

is a stoutly crenulated furrow. Metanotum finely aciculated, almost smooth. Basal third of propleuræ smooth, the apex above finely closely punctured, below more strongly closely, obliquely striated. Base of mesopleuræ finely aciculated, the base and middle finely striated the apex finely striated, bordered behind by a narrow clearly defined crenulated furrow which extends along the sternum to the apex. Basal half of metapleuræ smooth, the apical finely, closely reticulated, the two parts separated by a smooth oblique furrow. Mesosternum with a wide furrow deepest on outerside. On the sides, the hind tarsi are dilated, becoming gradually thinner towards the apex; the basal joint is as long as the following two united; the spurs thick, sharply pointed at the apex, closely, thickly serrated below, the claws small, curved. Mandibles tridentate, the apical tooth longer and sharper than the basal, which are bluntly rounded of equal size.

Phlebopenes Perty is identical with *Prionopelma* West. It is a genus well represented in the Neotropical Region and contains some of the largest Chalcids.

ELACHISTINÆ.

Elachistus carinatus. sp. n.

Black, shining, the antennæ testaceous, darker towards the apex, the legs yellowish fulvous, the coxæ and apex of femora with the fulvous tint brighter redder; the abdomen on the basal half broadly pale testaceous. Head and thorax sparsely covered with long white hair; the legs densely covered with white pubescence. Head and prothorax smooth, the mesonotum to near the apex strongly closely, transversely striated. Scutellum finely, closely, distinctly punctured, the ribs sides smooth and shining. Pleuræ smooth the propleuræ depressed in the middle. The antennæ are sparsely covered with long white hairs. Male. Length, 3 mm.

Bred from larva of Hawk-Moth.

The mesonotum has a distinct keel down the middle. Face broadly, roundly keeled in the middle, not separated from the clypeus. Prothorax prominent, narrowed, clearly separated from the mesonotum, which has narrow, but distinct parapsidal furrows and a distinct keel down the middle. Scutellum large, narrow at the base, bordered there laterally by oblique furrows, the apex bluntly rounded. Abdomen short, ovate, flat, shortly, but distinctly pedunculated. The short hind spur not quite so long as the metatarsus, the longer as long as the basal two joints united.

CHALCIDIDÆ.

EURYTOMINÆ.

Xenopelte, gen. nov.

Antennæ 10-jointed, the last three forming an indistinct club, the pedicel smooth, narrowed at the base, twice longer than wide, the others pilose, wider than long; they are placed immediately over the clypeus, which is clearly

separated all round. Eyes large, oval; the malar space as long as the antennal pedicle. Ocelli in a curve; the hinder separated from each other by double the distance they are from the eyes. Occiput almost transverse. The pronotum, scutellum, and mesonotum of almost equal length; there are complete parapsidal furrows. 2nd abdominal segment very large, as long as the head and thorax united. Post-marginal vein longer than the stigmal, submarginal almost twice the length of the marginal. Legs normal, pilose.

A genus of *Eurytomini* easily known by the very large 2nd abdominal segment; it being, as regards the length in comparison with the others, somewhat as in the genus *Eunotus*.

Xenopelte couridæ, sp. n.

Black, the legs pallid yellow, the femora and tibiæ more or less infuscated, the antennæ testaceous; wings hyaline, the nervures dark testaceous. Female. Length, 1-1.50 mm.

Bred from galls on leaves of *Courida*. Head and thorax shining, aciculated, the scutellum finely, closely transversely striated, its apex broadly rounded, and with a distinct margin or keel; the upper part of the head and thorax covered with a microscopic white pile, which is denser on the metathorax. Basal segment of abdomen raised, short, testaceous, the 2nd is finely microscopically punctured; the apical are sparsely covered with white hair, the ovipositor is moderately broad and shortly projects; the abdomen is longer than the head and thorax united.

In one example the coxæ and abdomen are fuscous; this may be through immaturity

PTEROMALINÆ.

Æronea gen. nov.

Antennæ 13-jointed, as long as the head and thorax, thickened towards the apex, but not much and gradually so; placed shortly below the middle of the face and of the eyes, which are large and parallel, neither converging above nor below. Head large, clearly wider than the thorax; the occiput widely roundly incised. Prothorax small, the apex transverse, raised. Mesonotum short, wider than long, as long as the scutellum, without furrows. Scutellum longer than wide, the apex rounded. Metanotum short, the basal central part finely, closely striated, opaque, this part having a longitudinal oval fovea on the outer edge; the outer part is smooth, has an oval fovea at the base and a triangular incision at the apex; the apex is broadly roundly raised in the middle and has a transverse fovea on the sides. Abdomen sessile, shorter than the thorax; its 2nd segment is longer than the 1st and longer than all the others united; the ovipositor shortly projects. The submarginal nervure about one-half longer than the marginal; the post-marginal one-fourth shorter than the latter and one-third longer than the stigmal vein, which is oblique and dilated at the apex.

The wide head and mesonotum, the absence of parapsidal furrows and the 3 foveæ on the sides of the metanotum are the characteristic features of this genus of *Pteromalinae*.

Æronea laticeps, sp. n.

Head and thorax dark bronzy black, the vertex and front laterally tinged with blue; the abdomen bright bronzy black, the base, sides apex and ventral surface bright metallic blue; antennal scape and pedicle fulvo-testaceous, the flagellum black, densely covered with white pubescence; legs yellowish testaceous, the femora for the greater part black, the hinder more completely so than the others. The head and thorax bear distinctly separated white hairs, the head with them shorter and closer than the thorax. Head finely, closely punctured; the mesonotum and scutellum much more strongly reticulated. Base of scutellum wide, not much narrower than the apex; the basal furrow deep, transverse, the lateral oblique furrows narrower. Tegulæ pale testaceous. Female. Length, 1.5-2 mm.

“On a Syrphid pupa.”

Pro- and metapleuræ smooth, the latter with a large fovea down the centre of the base, the lower part closely punctured; the mesopleuræ closely reticulated.

Pteromalus couridæ, sp. n.

Head dark blue, the pro- and mesothorax black, tinged with purple, the metathorax green, the abdomen black tinged with purple, the base and sides of 1st segment green, the green on the sides becoming gradually narrowed; legs yellow, almost white, the greater part of the femora black, more or less tinged with fuscous, the coxæ black to near the apex; antennæ with the pedicle and scape yellowish testaceous, the rest darker testaceous, blackish above, the pedicle pyriform, twice longer than it is wide at the apex, the 3rd joint one quarter longer than the 4th; the last three form a not very clearly separated club; the antennæ are slightly longer than the head and thorax-united. Head closely, finely punctured, more strongly on the vertex than elsewhere; the front bearing on the sides, white scattered hairs. Pro-notum finely, closely, the mesonotum more strongly transversely striated, the striæ more or less intertwining; those on the lateral lobes finer and forming almost reticulations. Scutellum, finely, closely, reticulated. Metanotum shining, smooth, the middle raised, bordered by keels, the sides (they are larger than the central part) bordered by a keel which curves inwardly at the apex. Wings clear hyaline, the nervures pallid testaceous; the marginal and post-marginal nervures are of almost equal length the stigmal branch fully half their length, its apex triangularly dilated. Abdomen fully as long as the head, and thorax united, from the middle becoming gradually narrowed to a fine point the apical segments fringed with white hair. Female. Length, 1.5 mm.

Bred from galls on *Courida* leaves.

Ocelli in a curve, the hinder separated from each other by almost double the distance they are from the eyes. Occiput almost transverse, the temples very slightly developed.

RHAPHITELINI.

Oluspa, gen. nov.

Head wider than the thorax, the eyes large, longish oval, parallel, not converging, widely separated; the ocelli placed in a curve, the hinder on the edge of the vertex; occiput almost transverse, the temples very little developed; malar space two-thirds of the length of the eyes. Antennæ placed almost in the middle of the face, opposite the end of the eyes. The front is very little depressed, the antennal furrow shallow, narrow. Antennæ 12-jointed the scape does not reach to the ocelli; the pedicle is more than twice longer than wide, the ring joints narrower than it and half its length; the apical joints do not form a club. Pronotum distinct, clearly separated from the mesonotum, which has weak, oblique furrows on the basal half. Scutellum large, nearly one-half longer than wide, the base transverse, bordered in the middle by a wide furrow; the apex broadly rounded. Metanotum keeled down the middle; the sides seen from above form large triangles. Abdomen sessile, as long as the thorax, the apex narrowed to a sharp point. Base of mesopleuræ depressed to near the middle, the raised apical part with a triangular depression above the middle. Legs normal; the spur on the hind tibiæ distinct. Wings shortly ciliated round the edges, the marginal nervure about one-third shorter than the basal, which is dilated at the apex; the post-marginal is slightly longer than the stigmal branch, which is a little dilated at the apex. The front femora are thicker than the others, especially in the middle. The clypeus forms a depression, rounded above; the apex transverse; there is a keel in the middle of the face.

Belongs to the *Rhaphitellini*—I cannot refer it to any of the described genera in that group. In Ashmead's system it runs near to *Rhaphitelus*. The occiput is narrower, more transverse and the temples less developed than in that group, the 2nd abdominal segment is smaller being not much longer than the 3rd. Characteristic are the ocelli placed in a curve on the extreme outer edge of the vertex.

Oluspa albopilosella, sp. n.

Dark blue, the head and upper part of thorax darker, more bronzy in tint, the back of the abdomen except round the edges dark bronzy; the antennal scape and pedicle rufo-testaceous, the rest of the flagellum dark fuscous, densely covered with white pubescence; the head and upper part of pro- and mesothorax with the scutellum sparsely covered with distinct thickish white hairs; legs whitish yellow, the four front coxæ blackish except at the apex, the hinder metallic blue, the four front femora largely fuscous above and below, the hinder black, tinged with blue from the base to near the apex; wings hyaline, the nervures pallid testaceous. Female. Length 2 mm.

Bred from pupæ found in fruit of *Cardiospermum halicacabum*. Head finely, closely, regularly punctured, the occiput finely closely transversely striated, the striæ roundly curved. Propleuræ smooth, the depressed base of mesopleuræ finely, regularly, closely reticulated, the lower apical part more

finely reticulated, the raised upper part smooth. Metanotum smooth, the outer edge finely aciculated—The colour on the top of thorax is tolerably uniform; on the pleuræ the blue is largely mixed with violaceous.

The scattered white hairs on the mesonotum are very conspicuous; the apical abdominal segments are fringed with white hair.

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APHELINÆ.
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Triolynx, gen. nov.

Antennæ placed nearly opposite the lower part of the eyes; 8-jointed, the scape not reaching to the middle of the eyes, compressed below, roundly narrowed at the base and apex, the pedicle bare, shining, narrowed at the base, twice longer than wide, as long as the following joint which, with the next, is a little longer than wide, the following as wide as long; the apical three form a well-marked, clearly separated club, wider than and as long as the preceding three joints united, rounded at the base and gradually narrowed towards the apex. Eyes large, oval, pilose; the malar space as long as the antennal pedicle. Ocelli in an equilateral triangle. Clypeus narrowed in the middle the sides roundly dilated. Occiput transverse; the temples very short. Parapsidal furrows complete, curved. Scutellum nearly as long as the mesonotum, transverse at the base, roundly narrowed towards the apex, twice longer than it is wide at the base; there is a distinct furrow down its middle. On the lower part of the mesopleuræ is a clearly defined longitudinal furrow, which is placed higher up at the base than at the apex. Marginal nervure twice the length of the basal; the stigmal branch much shorter than the post-marginal; 2nd abdominal segment as long as all the following united, the apical two gradually narrowed to a blunt point.

The pronotum is half the length of the mesonotum; it becomes gradually widened towards the apex. The head is wider than the thorax; the abdomen is slightly longer than the thorax; the metapleuræ at the apex project into a triangular point. Tibiæ unarmed.

Belongs to the *Aphelininæ*, tribe *Aphelinini*. It cannot well be confounded with any of the described genera; the clearly defined, three-jointed antennal club, the hairy eyes, very long marginal nervure and the furrowed scutellum are four points which should enable it to be easily recognised. In Ashmead's Arrangement (Mem. Cairn Mus. i, 345) it runs close to *Aneristus* How.

Triolynx clavicornis, sp. n.

Blue, the head darker coloured than the thorax, the 2nd and following segments of the abdomen black, the antennal scape pallid yellow, the flagellum densely covered with longish white pubescence, the legs pallid yellow, covered with a white pile, the coxæ blue. Wings hyaline, the nervures pallid; the edges ciliated, the ciliæ longer on the base of the costa. Female. Length, 2 mm.

Bred from Limacodid, *Phobetron hipparchia*.

Head closely, not very strongly punctured, the vertex sparsely covered with longish black, the front with shorter white hair. Thorax: the pronotum almost smooth; the mesonotum and scutellum closely, regularly distinctly punctured, the scutellum slightly more finely than the mesonotum, the pleuræ smooth and shining as is also the metanotum, which has a wide rounded keel down the centre, bordered by wide, deep furrows, rounded on the outside.

ENTEDONINÆ.

TETRACAMPINI.

Akonda, gen. nov.

Antennæ 10? jointed, placed immediately over the clypeus and below the eyes, the last joints forming a club. Eyes pilose, the malar space one-third of their length, obliquely narrowed to the mandibles. Temples short, roundly narrowed. Ocelli in a wide triangle. Pronotum distinct, roundly narrowed to the base. Mesonotum with the parapsidal furrows only indicated on the apical half. Scutellum large, wider than long, transverse at the base, roundly narrowed at the apex. Metanotum semi-circular, large, the sides margined, a finer keel down the centre. Submarginal vein short, narrow, thickened at the apex, one-fourth of the length of the marginal, which is longer than usual; post-marginal very short, the stigmal is as long as the latter, placed close to it and dilated at the apex. 1st abdominal segment as long as the following united, broad at the base, longer than it is wide at the apex, cup-shaped; the other segments become gradually narrowed to the apex, and are of about the same length.

The flagellum is stout, the joints wider than long, but not much, the scape distinctly narrower than it. The lower part of the mesopleuræ is widely depressed.

Belongs to the *Tetracampini* and comes, of the known genera, nearest to *Tetracampe*, from which it may be known by the pilose eyes, more sessile 1st abdominal segment and much shorter post-marginal nervure.

Akonda hipparchia, sp. n.

Blue, the apical half of the abdomen (from the apex of the 1st segment) black tinged with violaceous, the antennal scape and the legs whitish yellow, the coxæ blackish blue; antennal flagellum black, pilose; wings hyaline, the nervures pallid testaceous. Sparsely pilose, smooth, except the mesonotum which is finely closely reticulated. Female. Length, 1 mm.

Bred from Limacod *Phobetron hipparchia*.

PROCTOTRYPIDÆ.

SCELIONINÆ.

Trissolcus metallicus, sp. n.

Head and thorax dark or bright metallic green or blue, the pleuræ violaceous, the front, vertex and occiput mostly black; the basal half of the dorsal surface of the abdomen and the ventral surface, except at the apex, rufo-fulvous; antennal scape fulvous testaceous, the flagellum dark fuscous, almost black; legs fulvous testaceous, the base paler coloured; wings hyaline, the nervures testaceous; the apex is distinctly ciliated and the surface is pilose; when folded along the back they extend the length of the abdomen beyond its apex. Abdomen sessile, broad at the base—broader than the thorax—becoming gradually narrowed to a blunt point at the apex. Female. Length. 75 mm.

“Egg-parasites,” but it is not stated to what order of insects the eggs belonged.” Probably they were Hemipterous, as some species of *Trissolcus* have been reared from the eggs of bugs.

Antennæ as long as the body, slightly, gradually thickened towards the apex; the pedicle is narrowed towards the base and is twice the length of the 2nd, the following five or six are longer than wide, the others wider than long. Smooth, shining, sparsely haired; parapsidal furrows fine. Scutellum large, flat, almost semi-circular. The eyes are very large, converge slightly, but distinctly at the top, where they are separated by about the length of the basal two joints of the flagellum united.

Telenomini.

This group consists of minute insects which lay their eggs in those of others, chiefly *Lepidoptera* and *Hemiptera*.

Phanurus longiventris, sp. n.

Black, shining, the antennal scape, pedicle and legs rufo-fulvous; wings hyaline, the nervures pale fuscous, ciliated; the antennæ in both sexes densely pilose, the pile longer in the male the antennæ in female shorter, in female longer than the body; the last five joints in female thickened, forming a not very distinct club, the basal three joints of flagellum (3rd-5th) longer than the others. Head smooth, shining, the ocelli forming a large equilateral triangle, the hinder placed close to the eyes. Mesonotum opaque, closely punctured, its apex closely striated, thickly covered with white pubescence. Scutellum more shining, almost smooth, the apex with a crenulated furrow. Metanotum short. Abdomen nearly three times longer than the head and thorax united, its base raised into a

large, oblique, rounded tubercle, its sides closely strongly striated, the striæ curved roundly; the base of the 2nd segment has a striated border; it is much longer than any of the others, twice the length of the 1st. The abdomen becomes gradually narrowed to a fine point.

The male is similar, differing only in the longer, non-clavate antennæ and in the shorter abdomen which is as long as the head and thorax united, it is broader, not narrowed to a point at the apex, but forming a longish oval. Female. Length 2.5, Male 2 mm.

The specimens are labelled "Bred from egg-sack of mantis?" If correct this would be a new host, for the group-species of other genera are known, however as parasites in the eggs of Orthoptera.

Telenomus pulchricornis, sp. n.

Black, the antennal scape and the basal four or five joints of the flagellum rufo-fuscous, the legs pale rufo-testaceous, the wings hyaline, the nervures pale testaceous; the apical five joints of antennæ form a distinct club, thickened wider than long, the joint at its base narrower, more transversely ovate, wider than the joint at its base. Head smooth and shining, distinctly wider than the thorax. Eyes large, parallel. Ocelli in a wide curve, the hinder placed at the extreme edge of the vertex, touching the eyes. Mesonotum opaque closely punctured, thickly covered with short white pubescence. Pleuræ smooth, shining, the apex of mesopleuræ crenulated. 1st abdominal segment strongly striated the base of the 2nd with a narrow crenulated border, the abdomen is flattened, broadly ovate, not much longer than the thorax. Female. Length, a little more than 1 mm.

Antennæ thickly covered with white pubescence. Looked at from behind the mesonotum is seen to be striated at its apex. Scutellum very smooth bare and shining, margined behind by a crenulated border, just before its apex; post-scutellum continuous with this, opaque, finely rugose. The 1st funicular joint twice the length of the pedicle; the flagellum twice the length of the scape.

The specimens are marked as being reared from eggs of "plant bug."

Telenomus dilophonotæ, sp. n.

Black, the apex of coxæ narrowly, trochanters, base and apex of tibiæ and the tarsi whitish yellow; wings hyaline, the nervures pallid testaceous. The antennæ are not quite black, having a fuscous tint, the apical joints, forming the club, are clearly separated, the basal one smaller than the others, the apical conical, the others wider than long, the basal 32 joints of the flagellum longer than wide, the others shorter, as wide as long. Smooth shining, almost bare; the eyes large, projecting. Abdomen longish ovate, longer than the thorax, its basal segment slightly wider than long, striated, the segment entirely smooth. Female. Length hardly 1 mm.

Probably the amount of black on the legs varies. The apical joint of the tarsi may be black. Bred from eggs of the hawk-moths, *Dilophonota ello* and *Anceryx caicus*.

Telenomus atripes, sp. n.

Black, shining, the knees and tibiæ and tarsi testaceous, the apex of tibiæ infuscated, the rest of the legs fuscous rather than black, the antennæ dark testaceous, the apical four joints forming a not very distinct club, the basal three joints wider than long, the apical conical, longer than wide, the pedicle almost twice longer than wide, narrowed at the base, the middle joints are slightly wider than long, transversely oval. Wings hyaline, the nervures pale testaceous; the edges are distinctly ciliated. Female. Length, $\frac{1}{2}$ to $\frac{3}{4}$ of mm.

Bred from eggs of a Noctuid ("cutworm.")

Head distinctly wider than the thorax, which is longer than the abdomen. The colour of the legs varies, they may be almost entirely black; the fuscous runs into black.

SCELIONINI.

Macrotelia erythropus, sp. n.

Black, the legs red, the antennal scape of a slightly darker red, the apex slightly and narrowly blackish, the 2nd and 3rd joints piceous, the 4th and 5th of a darker piceous colour below; wings clear hyaline, the nervures pale fuscous, the stigmal branch more than twice the length of the marginal. Abdomen one half longer than the head and thorax united, the lateral keel stout, shining. Mesonotum with a furrow down the middle; this furrow is wider at the base, through the sides being obliquely sloped. Scutellum bordered by oblique, clearly defined furrows and with a triangular foveæ in the centre of the basal half. Tegulæ piceous. Densely covered with white pubescence. Sides of apical abdominal segment projecting into long spines above. Male. Length, 4 mm.

A stout keel runs down from the ocelli and is continued down the sides of the frontal furrow; it is bordered on both sides by three stout oblique keels. Centre of vertex irregularly finely rugose; there are three stout oblique keels on the sides, the lower sides curved. Eyes margined. The outer orbits on the inner half with two rows of foveæ formed by stout keels. The occiput margined with a crenulated border on the innerside. Pronotum smooth, the apex margined by a keel which runs down the pleuræ shortly behind the middle, the upper (and longer) part there being roundly curved. The upper apical part of the propleuræ is coarsely reticulated bordered below by a rounded keel; in the centre of the lower part are 2 keels, dividing it into four parts. There is a keel down the centre of the mesonotum, the parts on either side of it being depressed. Base of mesopleuræ stoutly, longitudinally striated. Post scutellum bordered by stout curved keels; the part on either side crenulated stoutly and bordered by a keel; the base of the metanotum is bordered by a

stout keel, roundly curved laterally ; it forms on the sides with the keel at the post-scutellum a longish triangular area, the narrowed end on the inner-side. The lower part of the mesopleuræ is bordered by a stout keel which commences at the base higher up and is there roundly curved ; there is a row of irregular foveæ down the apex.

Hadronotus leviventris, sp. n.

Black, the antennal scape, basal two joints of flagellum and the legs, except the coxæ, rufo-testaceous ; wings hyaline, closely ciliated, the nervures pallid testaceous. Female. Length, 1.5 mm.

Bred from eggs of plant bug."

The apical five joints of the antennæ form a stout club, clearly separated from the basal joints, its four basal joints are wider than long, the last thinner, longer than wide, conical. Head clearly wider than the thorax ; aciculated opaque, with scattered punctures. Eyes large, projecting, slightly converging above. Temples very little developed. Occiput broadly, roundly incised. Ocelli in a wide curve, the hinder close to the eyes, the central in the middle. Frontal depression deep, of equal width, closely somewhat strongly striated. Malar space longer than the eyes, roundly narrowed below. Mesonotum on basal two-thirds closely reticulated-punctured, the centre of the apical third bordered by furrows, irregularly, weakly striated and somewhat reticulated. Scutellum coarsely reticulated. There is a wide crenulated border on the base of the metanotum, the rest of which is irregularly reticulated. Base of propleuræ depressed, striated. There is a curved striated border on the base of the mesopleuræ, bordered by keels. Metapleuræ irregularly reticulated, more closely at the apex than at the base. Base of abdomen closely crenulated margined at the apex by a keel ; this is followed by a crenulated depression. The abdomen is shorter than the thorax, it is flat, longish oval ; the 2nd segment is larger than the others, wider than long,—and longer than all the following united ; the sides and apex are fringed with long, white hairs. Mesonotum densely covered with short white hair.

DIAPRIINÆ.

SPILOMICRINI.

Hoplopria, Ashm.

I refer two species in the collection to this genus. They are very different in structure, but the male fits in with Ashmead's descriptive of the male the only sex he describes, The Guiana female has 13-jointed antennæ, which have a 5-jointed club ; the base of the thorax is roundly narrowed, not transverse and forming a clearly separated collar as in the male ; the parapsidal furrows are wide ; there are 2 longish oval foveæ at the base of the scutellum, the abdominal petiole is about 3 times longer than wide and is strongly keeled above and laterally below. The collar, metathorax and abdominal petiole are thickly covered

with white pubescence. The temples are longer than in the male and are slightly, roundly narrowed. *H. curvispina* may form the type of a new genus; the narrowed transverse thorax and with it clearly separated, by being narrowed, from the mesonotum is different from what it is in the other genera, in which the base of the thorax is roundly narrowed.

Hoplopria curvispina, sp. n.

Black, shining, the greater part of the 2nd ventral abdominal segment rufo-piceous, legs of a darker rufo-piceous colour, the thickened part of the hind femora and the hind tibiæ and tarsi fuscous, the head and pronotum sparsely covered with longish fuscous hair; the metapleuræ, metanotum and petiole densely covered with long white pubescence, wings hyaline, slightly tinged with fuscous, highly iridescent, the nervures black. Post-scutellar spine large, broad at the base, the upper narrowed part thinner, but stout, curved, the apex with the lower part forming a broad, rounded curve. Face below the antennæ forming in the centre a flat plate, gradually roundly narrowed to a sharp point at the apex, its centre slightly depressed; from it a keel runs down to the clypeus, its apex triangularly dilated. Occiput transverse, stoutly margined. Base of thorax transverse, narrowed, forming a distinct collar; from it to the tegulæ the mesonotum is roundly curved inwardly. Parapsidal furrows deep, complete and scutellar foveæ large, deep, longish oval. Spine long, triangular below as seen from the side, dilated, the spine above curved, behind forming a semicircle with the lower part. Pleuræ broadly margined below, the keel on the propleuræ stouter than on the mesopleuræ, the hinder half narrower than the anterior. Abdominal petiole about four times longer than wide of equal width, shorter than the 2nd segment; the rest of the abdomen forms an elongated oval. Antennæ as long as the body, hardly tapering towards the apex, densely covered with short stiff blackish pubescence. Abdominal petiole keeled laterally above and below and with 2 keels down the centre, the lower of these being stouter than the others. Male. Length, 3 mm.

The 3rd antennal joint is about one quarter longer than the 4th and is as long as the scape.

Hoplopria picicornis, sp. n.

Black, the basal eight joints of the antennæ dark rufo-testaceous, the base of the scape blackish, the apical five joints (forming a club) piceous; the scape bearing longish white hair, the flagellum more densely covered with shorter white pubescence; the greater part of the 2nd and 3rd ventral segments piceous; legs dark rufo-testaceous; wings not very clear hyaline, the nervures dark testaceous; the edges are fringed with long hair; the wings are pilose and very iridescent. Head sparsely, the collar more densely and the meta-thorax and abdominal petiole still more densely covered with long white hair. Female. Length, 3 mm.

The basal two joints of the flagellum are twice longer than wide, the 3rd, 4th and 5th about one-half longer than wide, these being all of equal width, the 6th longer than wide, oval, the next thicker, narrowed at the base, the

basal four joints of the club are wider than long, the basal joint longer than the others compared with the width, the last is longer and conical. Smooth and shining. Parapsidal furrows distinct a transverse furrow at the base of the scutellum, which at the base, bears two longish oval foveæ. Post-scutellar spine prominent, its base roundly curved, the apex curved at the top, the rest with a longish straight, oblique, slope, which extends to near the apex of the metanotum. Abdominal petiole more than twice longer than wide, a stout keel on either side of the top and another down the sides. The lower part of the pro- and mesopleuræ is bordered-by a stout keel; down the middle of the metapleuræ are two curved keels, the two united by striæ; below and above them is a more irregular keel. The legs-bear erect white hairs, the hind femora have the apical half clavate, much thicker than the basal.

END OF HYMENOPTERA.

(Since the last instalment of the Hymenoptera was published we have received the news of Mr. Cameron's sudden death at New Mills, Derbyshire, on the 1st December, 1912. His age was 65 and for forty years he has been known as a specialist in Hymenoptera. His earliest descriptions of new species were published in the Transactions of the London Entomological Society in 1876 and following years. Mr. W. F. Kirby in his list of Hymenoptera in the British Museum, Vol. 1, 1882, said :—

“ I have to thank Mr. P. Cameron, of Glasgow, for types of several of his new species of Tenthredopsis.”

In 1882 he commenced the publication of a work in four volumes, entitled “ British Phytophagous Hymenoptera.” This was issued by the Ray Society and is an authority for the class of insects dealt with. This was followed by the Hymenoptera section of the *Biologia Centrali-Americana*. The fact that he was selected as one of the specialists on this monumental work proves that his reputation in Hymenoptera was very high.

Of late years he was known throughout the world. His willingness to help was so conspicuous that many Museums and travellers sent him their collections. In a bibliography of Hymenoptera for the two years 1906-7 he is credited with thirty papers in journals published in England, Scotland, Germany, United States, South Africa and Ceylon. Every specialist took account of his work and it is interesting to note that Prof. Chester Bradley, of Cornell University, connected his name with an *Evaniella*, collected at Bartica by Mr. R. J. Crew. *E. Cameroni* was one of several new species described in a paper entitled “ The *Evaniidæ* ” published in the Transactions of the American Entomological Society, June, 1908.

By connecting the name of the late Rev. W. Harper with one of our new species he brings to mind the fact that Mr. Harper contributed to “ *Timehri* ” in 1888 a paper on The Beetles of British Guiana; he also wrote on Lepidoptera for the “ *Argosy*.”)